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Crowell & Moring LLP			COLE, ELIZABETH M	
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# BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

**MAILED** 

Application Number: 09/828,480

Filing Date: April 09, 2001

Appellant(s): BJEKOVIC ET AL.

JUN 9 0 2005

**GROUP 1700** 

Donald Evenson For Appellant

SUPPLEMENTAL EXAMINER'S ANSWER

This is in response to the appeal brief filed July 7, 2004.

Art Unit: 1771

#### (1) Real Party in Interest

A statement identifying the real party in interest is contained in the brief.

## (2) Related Appeals and Interferences

A statement identifying the related appeals and interferences which will directly affect or be directly affected by or have a bearing on the decision in the pending appeal is contained in the brief.

#### (3) Status of Claims

The statement of the status of the claims contained in the brief is correct.

## (4) Status of Amendments After Final

No amendment after final has been filed.

#### (5) Summary of Invention

The summary of invention contained in the brief is correct.

### (6) Issues

The appellant's statement of the issues in the brief is correct.

# (7) Grouping of Claims

Appellant's brief includes a statement that claims 1, 3-25, 27-29 do not stand or fall together and provides reasons as set forth in 37 CFR 1.192(c)(7) and (c)(8).

# (8) Claims Appealed

The copy of the appealed claims contained in the Appendix to the brief is correct.

# (9) Prior Art of Record

0418772	DINTER et al	03-1991
5670235	STRICKER et al	09-1997

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#### (10) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claims 1,3-24,27-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over EP 418,772, (which is equivalent to DE 3931452 A1. An English translation of DE 3931452 A1 was supplied by Applicant), in view of Stricker et al, U.S. Patent No. 5,670,235. EP 418,772 discloses a laminate comprising a plurality of layers of thermoplastic film with sealing layers having a fiber layer disposed there between. The sealing layers have a melting point lower than the melting point of the thermoplastic films Looking at figure 5, it is apparent that EP '772 discloses a structuring having plural fabric layers, (3, 3', etc\_ and plural sealing layers, (5,5', etc). EP 418,772 differs from the claimed invention because EP 418,772 does not teach incorporating a foam layer into the laminate and does not teach that the fibers of the reinforcing fabric should partially melt during molding. Stricker et al teaches that informing a molded panel material comprising a plurality of layers including foam layers, thermoplastic layers and fabric layers, it is advantageous if the fabric layers partially melt in the portions of the fabric adjacent to the thermoplastic layer, in order to more strongly bond the layers. See col. 7, lines 39-45. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have employed a fabric material such that the fibers of the fabric would partially melt in the laminate of EP '772. One of ordinary skill in the art would have been motivated to employ a fabric wherein a portion of the fibers would melt during bonding to the other layers in order to enhance the strength of the bonds between the various layers of the material. Stricker teaches that it is

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important that most of the fibers not melt so that the fabric retains its integrity. Stricker teaches controlling the processing conditions so that only those fibers on the surface of the fabric will melt. Therefore, Stricker teaches that the amount of fibers to melted should be optimized during the fabrication process so that a stung bond is formed without the fabric integrity being destroyed. It further would have been obvious to have incorporated a foam layer in order to enhance sound deadening and insulating properties as taught by Stricker et al. With regard to the fibers widths, and the placement of the fabric, foam and thermoplastic layers, it would have been obvious to one of ordinary skill in the is art to have optimized the properties desired in the final product through the arrangement of the layers.

# (11) Response to Argument

Appellant argues that EP '772, (Dinter et al), does not teach or suggest the fibers of the reinforcing layers melting at all. The examiner agrees with this statement. However, Stricker et al teaches that shaped laminates which comprise thermoplastic film layers and fabric layers may be made so that the fabric layers comprise the same material as the film layers, (see col. 1, lines 39-43), which produces an environmentally friendly laminate material which can be easily recycled, (col. 2, lines 27-36). Stricker teaches that the strength of the fabric can be maintained by deforming and partially melting only those fibers which are at the interface of the film and fibers while the rest of the fabric remains undamaged, (see abstract; col. 1, lines 53 – 67; col. 7, lines 39-45). Although Appellant is correct that Stricker does not teach a maximum amount of 10% of

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the fibers as being melted, Stricker does teach that only those fibers at the interface of the film layers should be melted in order to optimize the strength of the bonding between the layers. Therefore, it is the examiner's position that Stricker teaches that the amount of fiber melting is a result effective variable and also that Stricker teaches that the amount of fiber melting should be minimal.

With regard to claims 4-5, Appellant argues that neither Dinter et al nor Stricker et al teach the claimed pressure. However, since Stricker teaches that the amount of fiber melted should be minimal and only at the interface of the film and fiber, it would have been obvious to have optimized the pressure and other processing parameters such as temperature, heating time, etc., through the process of routine experimentation in order to form a bond having the desired degree of melted fibers. Similarly, with regard to claims 7-8, it would have been obvious to have optimized the time the laminate is subjected to the heat and pressure for the reasons set forth above.

With regard to claims 9-12, 23 and 24, Appellant argues that Stricker does not disclose a foam layer. However, Stricker teaches an "open-cell or pore layer". Open-cell or open pore layers are other names for foams. See col. 3, lines 13-17. With regard to the placement of the foam layer, it would have been obvious to one of ordinary skill in the art to have selected the appropriate placement of the foam layer in view of the intended use of the laminate.

With regard to claims 16,17,27-29, although the references are silent with regard to the fiber size, since the fibers are used for reinforcements, it would have been

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obvious to have optimized the size of the fibers through the process of routine experimentation in order to arrive at a fabric having the desired strength and durability. For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

Elizabeth M. Cole Primary Examiner Art Unit 1771

e.c. September 20, 2004

Conferees
Terrel Morris — From
Deborah Jones Proportion

MICHAEL BEST & FRIEDRICH, LLP 100 E WISCONSIN AVENUE MILWAUKEE, WI 53202